



STATE OF CALIFORNIA

GAVIN NEWSOM, Governor

## PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE  
SAN FRANCISCO, CA 94102-3298

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**Agenda ID #18534**  
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TO PARTIES OF RECORD IN RULEMAKING 14-07-002, APPLICATION 16-07-015:

This is the proposed decision of Commissioner Guzman Aceves. Until and unless the Commission hears the item and votes to approve it, the proposed decision has no legal effect. This item may be heard, at the earliest, at the Commission's July 16, 2020 Business Meeting. To confirm when the item will be heard, please see the Business Meeting agenda, which is posted on the Commission's website 10 days before each Business Meeting.

Parties of record may file comments on the proposed decision as provided in Rule 14.3 of the Commission's Rules of Practice and Procedure.

/s/ ANNE E. SIMON

Anne E. Simon

Chief Administrative Law Judge

AES:mph

Attachment

Decision **PROPOSED DECISION OF COMMISSIONER GUZMAN ACEVES**  
(Mailed 6/12/2020)

**BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking to Develop a  
Successor to Existing Net Energy Metering  
Tariffs Pursuant to Public Utilities Code  
Section 2827.1, and to Address Other Issues  
Related to Net Energy Metering.

Rulemaking 14-07-002

And Related Matter.

Application 16-07-015

**DECISION ADOPTING STANDARDIZED INPUTS AND ASSUMPTIONS FOR  
CALCULATING ESTIMATED ELECTRIC UTILITY BILL SAVINGS FROM  
RESIDENTIAL PHOTOVOLTAIC SOLAR ENERGY SYSTEMS****Summary**

This decision adopts standardized inputs and assumptions to be used by solar providers in the calculation and presentation of expected electric utility bill savings to residential consumers of photovoltaic solar energy systems.

This proceeding remains open.

## 1. Background

California Public Utilities Code<sup>1</sup> Section 2854.6(a), enacted by Assembly Bill (AB) 1070 (Stats. 2015, Ch. 662), directs the California Public Utilities Commission (Commission or CPUC) to “develop standardized inputs and assumptions to be used in the calculation and presentation of electric utility bill savings to a consumer that can be expected by using a solar energy system by vendors, installers, or financing entities.”

On July 18, 2019, the assigned administrative law judge issued a ruling inviting comments on a staff proposal for standardized inputs and assumptions, in accordance with Public Utilities Code Section 2854.6(a), and a process for developing an online calculator to estimate electric bill savings (initial staff proposal). The initial staff proposal also includes recommendations for the applicability and enforcement of standardized inputs and assumptions. In summary, the initial staff proposal recommends:

1. Standardization of the following inputs or assumptions:
  - a. Annual electricity consumption
  - b. Solar electricity generation
  - c. Rate schedules (before and after installing solar)
  - d. Average escalation of electricity provider residential retail rates
  - e. Annual degradation rate of the solar energy system (panels and inverter)
2. Estimated electric bill savings should be calculated for the first 20 years following interconnection of a system.

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<sup>1</sup> Unless otherwise stated, all subsequent references are to California statute.

3. Upon request by a customer, solar providers<sup>2</sup> must make all steps and figures in the calculation process available to the customer prior to the point of sale. Solar providers must also make this information available to Commission staff, upon request.
4. Every solar provider who intends to enter into a transaction with a customer should be required to calculate and present estimated electric bill savings, using the standardized inputs and assumptions adopted by the Commission.
5. The requirement to calculate and present estimated bill savings, using the standardized inputs and assumptions, should become effective within 120 days after the Commission adopts standardized inputs and assumptions.
6. Estimated electric bill savings calculations should be within scope of an administrative penalty mechanism, as contemplated in Decision (D.) 18-09-044, and should be expanded to all investor owned utility (IOU, including applicable small and multi-jurisdictional utility<sup>3</sup>) service territories
7. The CPUC may modify the standardized inputs and assumptions in the future based on new information or other factors.

The initial staff proposal also includes a number of questions for which the July 18, 2019 ruling invited stakeholder input.

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<sup>2</sup> As defined in Decision 18-09-044: "We define solar providers as vendors, installers, financing entities, and contractors involved in the sale, lease, or power purchase agreement (PPA) of a rooftop solar energy system and applying to interconnect customers to the utility's distribution system. This definition is consistent with AB 1070's use of solar energy systems companies and solar contractors."

<sup>3</sup> Pacific Gas and Electric Company, Liberty Utilities (CalPeco Electric) LLC, PacifiCorp, San Diego Gas & Electric Company, and Southern California Edison Company.

On August 13, 2019, Commission staff held a workshop to present the details of the initial staff proposal and to address questions and receive comments from stakeholders.

On August 27, 2019, Aurora Solar, California Solar and Storage Association (CALSSA) and Solar Energy Industries Association (SEIA) (jointly, CALSSA/SEIA), California Energy Storage Alliance (CESA), Coalition of California Utility Employees (CUE), Pacific Gas and Electric Company (PG&E), Solar Consumer Advisor (SCA), Southern California Edison Company (SCE), San Diego Gas & Electric Company (SDG&E), and The Utility Reform Network (TURN) filed comments in response to the ruling. On September 6, 2019, Aurora Solar, CALSSA and SEIA, PG&E, SCA, SDG&E, and TURN filed reply comments.

Commission staff modified the staff proposal in response to party comments (modified staff proposal); a copy of the modified staff proposal is included in this decision as Attachment A (redlined from initial staff proposal) and Attachment B (final, without redlines).<sup>4</sup> We address parties' comments to the extent they pertain materially to the determinations we reach in this decision.

## **2. Adoption of staff proposal**

This decision adopts the modified staff proposal, as modified in response to party comments. In this section we discuss the key aspects of the modified staff proposal, focusing on the major policy determinations, which inform our consideration of the specific recommendations for standardized inputs and assumptions.

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<sup>4</sup> The final version of the modified staff proposal (i.e., without redlines) is also posted to the Commission's website at the following url: [www.cpuc.ca.gov/ab1070revisedstaffproposal](http://www.cpuc.ca.gov/ab1070revisedstaffproposal).

**2.1. Applicability of standardized inputs and assumptions; duration of savings estimates**

The modified staff proposal recommends requiring that every solar provider who intends to enter into a photovoltaic solar transaction with a residential customer<sup>5</sup> in the state of California (except for new housing construction where a solar system is installed prior to sale) calculate and present estimated electric bill savings to the customer, and this calculation must use the staff proposal's standardized inputs and assumptions. Related to this requirement, the modified staff proposal recommends that estimated electric bill savings be calculated for the first 20 years following interconnection of a system. As explained further in Section 7 of the staff proposal, this requirement would be effected via inclusion of the standardized calculation in the supporting information pages of the Solar Energy System Disclosure Document (disclosure document), which state law requires be presented to all prospective solar consumers.<sup>6</sup> If a solar provider presents a bill savings estimates to a customer prior to the point of sale, this standardized calculation must be presented to the customer at that time as well.

This requirement will not preclude providers from developing their own methodologies for savings calculations and presenting those estimates as well; parties raised that developers' proprietary calculations often reflect factors that are tailored to the individual consumer. The modified staff proposal provides

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<sup>5</sup> As defined by the customer's current customer class with their electric utility.

<sup>6</sup> Business and Professions Code Section 7169(a): "The board, in collaboration with the Public Utilities Commission, shall develop and make available a "solar energy system disclosure document" or documents that provide a consumer, at a minimum, accurate, clear, and concise information regarding the installation of a solar energy system, total costs of installation, anticipated savings, the assumptions and inputs used to estimate the savings, and the implications of various financing options."

that solar providers may also present an alternative calculation, i.e., an estimate of bill savings using different inputs and assumptions, except for the assumed annual escalation of electricity provider rates, which must follow the modified staff proposal in all cases. Any alternative calculations must be presented side-by-side with the CPUC-approved standardized calculation. Further, the modified staff proposal recommends permitting solar providers to also present bill savings estimates that use alternative scenarios of the customer's future energy consumption, but such estimates must clearly explain they are not based on the customer's historic consumption.

CALSSA/SEIA assert the Commission should not require solar providers to present a bill savings estimate to customers, primarily because CALSSA/SEIA assert the Commission lacks authority to adopt such a requirement, but also because "[a]n increasing number of businesses are moving away from savings estimates and relying on those non-savings factors when speaking with customers."<sup>7</sup> This latter assertion appears highly dubious, and CALSSA/SEIA offer no evidence to substantiate this claim. One of the primary advantages of distributed solar to a customer is bill savings; we are skeptical of claims that solar providers would not make claims or estimates about potential savings to customers. But even if it is true, solar advertisements that tout such savings are and have been so prevalent in the past several years that it is reasonable to assume, non-financial motivations notwithstanding, customers expect to save *some* amount on their electric bills by installing solar.

Therefore, it is reasonable to require that all prospective solar customers be provided an estimate of the electric bill savings they can anticipate from

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<sup>7</sup> CALSSA/SEIA opening, at 4.

installing a solar energy system. With respect to CALSSA/SEIA's assertion that the Commission lacks authority to adopt such a requirement, we disagree as such a requirement is necessary and convenient in the exercise of our jurisdiction over the utilities' interconnection processes. Requiring some measure of transparency into anticipated bill savings is clearly "cognate and germane" to our exclusive authority over public utility matters, which includes but is not limited to the power to "protect the people of the state from the consequences of destructive competition and monopoly in the public service industries," as well as excessive charges.<sup>8</sup>

Although we find good reason to require that solar providers calculate and present electric bill savings estimates, based on the modified staff proposal's inputs and assumptions, we recognize the need to balance the potentially competing values articulated in AB 1070, *i.e.*, for consumers to receive "accurate, clear and concise" information on solar energy systems, given Aurora Solar and CALSSA/SEIA's assertions that PVWatts is too simplistic to be sufficiently

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<sup>8</sup> Public Utilities Code Section 701. See also *Sale v. Railroad Com.* (1940) 15 Cal.2d 612, 617. See also *Order Instituting Rulemaking to Implement Senate Bill No. 1488 Relating to Confidentiality of Information – Order Granting Limited Rehearing of Decision 06-12-030 and Denying Rehearing of Decision in All Other Respects* [D.09-03-046] (2009), at 19 ("We also underscore our duty and commitment to protecting the interests of ratepayers and ensuring that Californians are not subject to experiencing abuses similar to those visited upon the State during the 2000-01 Energy Crisis."); *Order Instituting Rulemaking to Consider Refinements to and Further Development of the Commission's Resource Adequacy Requirements Program – Decision of Phase 2 – Track 2 Issues: Adoption of a Preferred Policy for Resources Adequacy* [D.10-06-018] (2010), at 13 ("[W]e cannot neglect our other primary public duty: protection of ratepayers from excessive charges...."). Separately, the plain language as well as the legislative analysis of AB 1070 make clear the legislature's intent that solar providers must present anticipated savings to customers as part of the standard disclosures for which CSLB is required to develop a solar energy disclosure document. In particular, see the June 22, 2017 bill analysis of the Senate Committee on Business, Professions and Economic Development (for May 2, 2017 version of AB 1070), accessible at the following url:

[http://leginfo.legislature.ca.gov/faces/billAnalysisClient.xhtml?bill\\_id=201720180AB1070#](http://leginfo.legislature.ca.gov/faces/billAnalysisClient.xhtml?bill_id=201720180AB1070#)



accurate for solar providers' purposes, and similar concerns raised during the August 13, 2019 workshop about tradeoffs between accuracy and conciseness. The modified staff proposal strikes a balance among accuracy, clarity and conciseness by selecting a limited number of inputs and assumptions to standardize, while providing that solar providers may present alternative calculations (using alternative inputs) and alternative scenarios of future energy consumption.

PG&E, SCA, SCE, and TURN assert solar providers should not be permitted to present alternative calculations and/or alternative scenarios; TURN argues that doing so would defeat the purpose of the standardized approach and, further, "sales representatives will orally represent to customers that the 'state-mandated approach' is deeply flawed and suggest that the vendor's own analysis is far superior."<sup>9</sup> We do not agree that allowing alternative calculations defeats the purpose of a standardized approach. In cases where a customer seeks offers from multiple providers – a practice endorsed by both government and industry<sup>10</sup> – customers should receive standardized bill savings estimates (from different solar providers) that are comparable to each other. Only alternative calculations and alternative scenarios, if offered, should differ substantially from one provider to the next. However, TURN's latter concern regarding a solar provider's presentation of its own estimate as superior is valid, particularly in situations where a customer does not seek multiple bids but may instead be

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<sup>9</sup> TURN opening, at 2.

<sup>10</sup> See SEIA's *Residential Consumer Guide to Solar Power*, Version 4 (June 2018), at 4 (accessible at <https://www.seia.org/research-resources/residential-consumer-guide-solar-power>); CSLB's Solar Smart webpage (<http://www.cslb.ca.gov/solar>); and the CPUC's *California Solar Consumer Protection Guide*, Version 2 (September 2019), at 4 (accessible at <https://www.cpuc.ca.gov/solarguide/>).

solicited by a door-to-door salesperson or otherwise targeted directly. We address this concern through the one major modification to the initial staff proposal specifics, annual escalation of electricity provider rates, which we discuss further in Section 2.5.

With respect to accuracy, estimates using long-term forecasts of any kind are inherently uncertain, and may thus prove radically inaccurate. Therefore, as suggested by SDG&E and SCE, any bill savings estimate should be accompanied with language regarding the inherent uncertainty of such estimates, especially those spanning any timeframe longer than one year. The public interest is served by providing a transparent explanation that bill savings estimates are just estimates, not guaranteed amounts, and that numerous factors will impact the actual bill savings that customers ultimately realize from installing a solar energy system. This decision directs Commission staff to work with the CSLB to incorporate standardized language that identifies uncertainties in bill savings estimates into the solar disclosure form.

## **2.2. Transparency of bill savings calculations**

The initial staff proposal recommends that all steps and figures in the calculation process be made available to a customer, if requested by the customer, prior to the point of sale. The initial staff proposal also provides that solar providers must make this information available to Commission staff, also upon request.

CALSSA/SEIA request clarification of the specific information solar providers should provide to consumers, and suggest consumers will have little use for the highly detailed and lengthy dataset used to calculate their bill savings estimate. CALSSA/SEIA instead suggest that solar providers disclose the standardized inputs and assumptions and “other reasonable inputs” such as tilt

and azimuth. We generally agree that most consumers will not endeavor to reproduce savings calculations, therefore it is not crucial for solar providers to provide such information to consumers. Thus, the modified staff proposal omits this requirement.

To the extent customers do wish to calculate savings estimates, the online calculator to be developed in the second phase discussed in the modified staff proposal should enable such calculations, and solar providers will be required to provide key inputs and assumptions to customers as part of the supplemental disclosure forms under development by the CSLB. These key inputs and assumptions should include, at minimum:

- Panel capacity (kW);
- inverter capacity (kW);
- tilt (degrees);
- azimuth (degrees);
- assumed inflation rate (if presenting estimates in real dollars);
- assumed discount rate (if presenting estimates in present value); and
- other inputs deemed necessary by Commission staff.

We will direct Commission staff to work with the CSLB to ensure the disclosure document requires solar providers to identify key inputs and assumptions used in any electric bill savings calculations presented to a customer.

There remains, however, a need for transparency of all steps and figures in the calculation process. The Commission must retain the ability to review documentation (1) to determine whether solar providers are using the standardized inputs and assumptions, and (2) to reproduce savings estimates in

cases where solar providers present alternative calculations or scenarios. The modified staff proposal recommends directing the electric utilities to collect all steps, figures and backup documentation in the calculation process for at least 100 interconnection applications, as part of the semi-annual audit process ordered in D.18-09-044.

### **2.3. Effective date of standardized inputs and assumptions**

The modified staff proposal recommends the requirement for solar providers to calculate and present bill savings estimates, using the modified staff proposal's standardized inputs and assumptions, take effect 120 days after the effective date of this decision. CALSSA/SEIA and Aurora Solar caution against this recommendation, noting a connection between the proposed effective date and proposed enforcement of this decision. CALSSA/SEIA also express concern that the CSLB may not have finalized the supplemental disclosure forms, through which the bill savings estimate must be presented, in time for the IOUs to make the necessary modifications to their interconnection portals for these documents to be uploaded. Aurora Solar asks for a one-year grace period for enforcement of this decision to take effect, arguing that solar providers need more than 120 days to adjust and train, and to make changes to third-party software tools.

As the modified staff proposal states, Commission staff is collaborating with the CSLB on inclusion of the bill savings estimate in the supplemental disclosure forms. It is our expectation that the CSLB will finalize the supplemental disclosure forms in time for the IOUs to modify their interconnection portals, and we are not at this time persuaded that solar providers will need more than 120 days to adjust their practices or processes. For flexibility, however, and as we have afforded in past decisions, we will authorize

the Energy Division director or his/her/their designee to modify the effective date of the electric bill savings calculation and presentation requirement we adopt in this decision.

#### **2.4. Enforcement**

As previously mentioned, the modified staff proposal recommends requiring that the bill savings calculation that uses the modified staff proposal's standardized inputs and assumptions be included in the disclosure documents developed by CSLB. This decision directs the IOUs to include this requirement in the scope of the semi-annual spot audits required in D.18-09-044. The IOUs shall:

- confirm that disclosure documents include a bill savings estimate that uses the modified staff proposal's standardized inputs and assumptions;
- confirm that disclosure documents include language that explains that the bill savings estimate is only an estimate (not a guarantee), as directed in Section 2.1 of this decision.

D.20-02-011 authorizes the Commission's Consumer Protection and Enforcement Division (CPED) to propose a citation program for the consumer protection requirements established in both D.18-09-044 and D.20-02-011. The scope of CPED's proposed citation program shall include fines or other penalties regarding the required electric bill savings estimate disclosures adopted in this decision.

#### **2.5. Annual escalation of electricity provider rates**

The modified staff proposal reflects minimal changes to the standardized inputs and assumptions described in the initial staff proposal. The most significant revision is to the average escalation of electricity provider residential rates. This is an important input for any calculation of energy savings: the higher

the estimate of future electricity rates, the greater the estimated bill savings (all else equal). As TURN notes, “every provider will choose the maximum allowable escalation rate in order to boost the forecasted savings.”<sup>11</sup> The initial staff proposal provides that solar providers may select an escalation rate within 2.12 percent above or below the five-year average inflation rate for residential retail electricity prices (in the applicable electricity provider’s service territory). The modified staff proposal removes the option to select an escalation rate above or below the average inflation rate, and limits the maximum assumed escalation rate to four (4) percent. The average escalation rate of the large IOUs over the past five years, weighted by their proportion of customers, is 3.2 percent. To allow for fluctuations over time and for simplicity, the modified staff proposal rounds this figure upward to four percent.

Because we permit solar providers to present alternative calculations, it makes little sense for the standardized inputs and assumptions to include a range of possible values for the annual escalation rate of electricity provider rates. Thus, the modified staff proposal recommends a more simplified assumption.

We further adopt an upper limit to this standardized input, as described above. Exaggerating future utility rate increases is an easy and effective means to overstate long-term bill savings. As PG&E suggests, there is no financial risk to customers of underestimating future utility rate increases, while there is a potentially major financial risk associated with overestimating future utility rate increases. Therefore, while allowing flexibility for all other inputs and assumptions, we find it reasonable to limit the rate at which future electricity

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<sup>11</sup> TURN opening, at 4.

provider rates may be assumed to increase; all bill savings calculations, including alternative calculations, must follow the modified staff proposal's standardized assumption for annual electricity provider rate escalation.

### **3. Comments on Proposed Decision**

The proposed decision of the assigned Commissioner in this matter was mailed to the parties in accordance with Section 311 of the Public Utilities Code and comments were allowed under Rule 14.3 of the Commission's Rules of Practice and Procedure. Comments were filed on \_\_\_\_\_, and reply comments were filed on \_\_\_\_\_ by \_\_\_\_\_.

### **4. Assignment of Proceeding**

Martha Guzman Aceves is the assigned Commissioner and Patrick Doherty and Valerie U. Kao are the assigned Administrative Law Judges in this proceeding.

### **Findings of Fact**

1. The Commission must retain the ability to review the documentation of solar providers who seek to interconnect to an investor owned utility to determine whether solar providers are using the standardized inputs and assumptions adopted in this decision, and to reproduce savings estimates in cases where solar providers present alternative calculations or scenarios.

2. Exaggerating future utility rate increases is an easy and effective means to overstate long-term bill savings.

### **Conclusions of Law**

1. AB 1070 requires the CSLB, in collaboration with the CPUC, to develop a standardized disclosure document that provides accurate, clear and concise information regarding the installation of a solar energy system, total costs of

installation, anticipated savings, the assumptions and inputs used to estimate the savings, and the implications of various financing options.

2. It is reasonable to require that all prospective solar customers be provided an estimate of the electric bill savings they can anticipate from installing a solar energy system, because customers expect to save some amount on their electric bills by installing a solar energy system.

3. The Commission is vested with exclusive authority to oversee implementation of net energy metering.

4. The bill savings calculation and disclosure requirements in this decision are necessary and convenient in the exercise of the Commission's jurisdiction over the utilities' interconnection processes.

5. It is reasonable to permit solar providers to present alternative calculations of electric bill savings estimates and alternative scenarios of future energy consumption.

6. It is reasonable to direct Commission staff to work with the CSLB to incorporate language into the disclosure document that identifies uncertainties in bill savings estimates.

7. It is reasonable to require the electric utilities to collect all steps, figures and backup documentation in the calculation process for at least 100 interconnection applications, as part of the semi-annual audit process ordered in D.18-09-044.

8. It is reasonable to require the electric utilities to include the requirements of this decision in scope of the semi-annual audits ordered in D.18-09-044.

9. It is reasonable to limit the rate at which future electricity provider rates may be assumed to increase, for all electric bill savings estimates provided by solar providers.



**O R D E R****IT IS ORDERED** that:

1. Except as specified in this decision, the *Standardized Solar Energy System Electric Bill Savings Inputs and Assumptions: a Staff Proposal* (staff proposal) is adopted pursuant to California Public Utilities Code Section 2854.6. The adopted staff proposal is included with this decision as Attachment A (redlined) and Attachment B (final).
2. (a) Within 120 days after the issue date of this decision, Bear Valley Electric Service, Pacific Gas and Electric Company, Liberty Utilities (CalPeco Electric) LLC, PacifiCorp, San Diego Gas & Electric Company, and Southern California Edison Company (together, the utilities) shall each modify their interconnection processes to enable and require uploading of a document that includes (1) an electric bill savings estimate that uses the standardized inputs and assumptions adopted by this decision, and (2) language developed by the Contractors State License Board in consultation with the Commission regarding uncertainties in electric bill savings estimates. The standardized inputs and assumptions adopted by this decision shall be posted to each utility's Internet website.
  - (b) If a solar provider executes a contract with a residential customer for solar on or after the date that a utility completes modification of its interconnection process in accordance with this order, the solar provider is required to upload a document that includes an electric bill savings estimate that uses the standardized inputs and assumptions adopted by this decision.
  - (c) The director of Energy Division, or his/her/their designee, is authorized to adjust this schedule if necessary to ensure efficient and cost-effective implementation.
3. Commission staff is authorized to work with the Contractors State License Board to incorporate standardized language that identifies uncertainties in bill

savings estimates into the solar energy system disclosure document required pursuant to California Business and Professions Code Section 7169.

4. Commission staff is authorized to work with the Contractors State License Board to ensure the solar energy system disclosure document required pursuant to California Business and Professions Code Section 7169 requires solar providers to identify key inputs and assumptions used in any electric bill savings calculations presented to a customer.

5. Bear Valley Electric Service, Liberty Utilities (CalPeco Electric) LLC, and PacifiCorp shall conduct spot audits as described in Section 2.2.7 of Decision 18-09-044. Bear Valley Electric Service, Liberty Utilities (CalPeco Electric) LLC, and PacifiCorp shall provide audit findings to the Contractors State License Board to substantiate grounds for disciplining contractors for violations of Contractors State License Board rules and regulations, and shall also cooperate with the Utility Enforcement Branch's audit activities.

6. After Bear Valley Electric Service, Pacific Gas and Electric Company, Liberty Utilities (CalPeco Electric) LLC, PacifiCorp, San Diego Gas & Electric Company, and Southern California Edison Company (together, the utilities) modify their interconnection processes in accordance with Ordering Paragraph 2, each of the utilities shall collect all steps, figures and backup documentation in the calculation process of electric bill savings estimates for at least 100 interconnection applications, as part of the semi-annual audit process ordered in Decision 18-09-044.

7. Bear Valley Electric Service, Pacific Gas and Electric Company, Liberty Utilities (CalPeco Electric) LLC, PacifiCorp, San Diego Gas & Electric Company and Southern California Edison Company shall include the requirements of this

decision, as detailed in Section 2.4, in the scope of the semi-annual audits required by Decision 18-09-044.

8. The Commission's Consumer Protection and Enforcement Division is authorized to include the electric bill savings estimate requirements adopted in this decision within scope of the proposed citation program authorized by Decision 20-02-011.

9. Rulemaking 14-07-002 and Application 16-07-015 (consolidated) remains open.

This order is effective today.

Dated \_\_\_\_\_, at San Francisco, California.

**ATTACHMENT A & B**